

IN THE SPECIFICATION:

Please amend the Specification as follows:

Please replace paragraph on page 9, beginning at line 11 with the following amended paragraph:

a1
The specific color extracting means 2 ~~extract~~ extracts only a preset color from an input image. The resolution converting means 3 reduces a resolution of the input image from which the specific color was extracted by the specific color extracting means 2. In a specific example, the resolution converting means 3 is capable of reducing 600dpi of the input image to about 100dpi. Where the resolution is converted into 100dpi, the diameter of the object image 1 is 40 dots when the magnification is 100%.

Please replace paragraph on page 13, beginning at line 6 with the following amended paragraph:

a2
As ~~seen~~ shown in Fig. 3, the size (diameter) of the object image 1 varies depending on the magnification. Therefore, in each of the characteristic quantity 1A detecting the area, characteristic quantity 1B detecting area, characteristic quantity 1C detecting area, and characteristic quantity 1D detecting area, the positions corresponding to the magnification levels, i.e., portions containing numerals in Fig. 5, are assigned to magnification estimating areas (1) to (9), respectively.

Please replace paragraph on page 14, beginning at line 19 with the following amended paragraph:

Q3
A-23-04

Fig. 6 is a block diagram showing an ~~exemplar~~ exemplary arrangement of the magnification estimating means 61. In the magnification estimating means 61, signals output from the characteristic quantity computing means 51A to 51D are input to coincidence computing portions 61A to 61C, respectively. The coincidence computing portion 61A compares the ON pixel information received from the characteristic quantity computing means 51A to 51D, and checks if those four pieces of ON pixel information are coincident with one another. When those four pieces of information are coincident with one another, the ON pixel information decided to be coincident is output to ^a~~an~~ valid coincidence-degree select portion 61H.

Please replace paragraph on page 15, beginning at line 6 with the following amended paragraph:

Q4

The computing portion 61B likewise compares the ON pixel information received from the characteristic quantity computing means 51A to 51D, and checks if three of those four pieces of ON pixel information are coincident with one another. The coincidence computing portion 61C compares the ON pixel information received from the characteristic quantity computing means 51A to 51D, and checks if two of those four pieces of ON pixel information are coincident with each other.

Please replace paragraph on page 15, beginning at line 14 with the following amended paragraph:

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The detect results by the computing portions 61B and 61C are respectively output to error comparing portions 61D and 61E. Each of the error comparing portions 61D and 61E ~~compute~~ computes differences or errors between the pieces of ON pixel information, which are not coincident, output from the characteristic quantity computing means 51A to 51D and the pieces of ON pixel information, which are coincident, output from the same. When the errors are within a preset range in a corresponding error register 61F, 61G or 74, when the computed errors are within the preset error range of the error register, the pieces of ON pixel information, which are ~~incident-coincident~~, are output from the computing portion 61B and the coincidence computing portion 61C to the valid coincidence-degree select portion 61H.

Please replace paragraph on page 17, beginning at line 3 with the following amended paragraph:

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Description will now be given about a process of computing the ON pixel information as a characteristic quantity (characteristic quantity (2)), which represents the inner pattern of the object image 1, ~~which the~~ The process is carried out by the characteristic quantity computing means 52. A circular area (corresponding to the object image 1 whose magnification is 120%) of 48 dots in diameter, hatched in Fig. 7, is first provided as ~~[[a]]~~ the characteristic quantity (2) extraction area 42 within a cut-out image area 41 cut out by the window processing means 4. The characteristic quantity computing means 52 counts the ON pixels within the characteristic quantity (2) extraction area 42 for the image within the cut-

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out image area 41, and outputs the resultant to the ~~are~~ area magnification estimating means 62.

Please replace paragraph on page 17, beginning at line 17 with the following amended paragraph:

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The results of counting the number of the ON pixels of the object image 1, which corresponds to the magnification within the characteristic quantity (2) extraction area 42, are shown in Fig. 8. As ~~seen from~~ shown in Fig. 8, the number of the ON pixels within the characteristic quantity (2) extraction area 42 varies depending on the magnification. When the object image 1 is present within the cut-out image area 41, a magnification corresponding to the object image 1 within the cut-out image area 41 cut out by the ~~are~~ area magnification estimating means 62 can be estimated on the basis of the number of ON pixels within the characteristic quantity (2) extraction area 42, which is counted by the characteristic quantity computing means 52.

Please replace paragraph on page 20, beginning at line 11 with the following amended paragraph:

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A block diagram showing an exemplary arrangement of the judging means 7 is shown in Fig. 11. In the judging means 7, pieces of magnification information output from the magnification estimating means 61 to 63 are input to coincidence degree computing portions 71 and 72. The coincidence degree computing portion 71 compares the magnification information received from the magnification estimating means 61 to 63, and judges whether or not those pieces of information are coincident with one another. If the pieces of information are coincident

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with one another, the judging means 7 judges that [[an]] the object image 1 is contained in the cut-out image area 41, and outputs the result of the judgement to a valid coincidence degree select portion 75.

Please replace paragraph on page 20, beginning at line 24 with the following amended paragraph:

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Similarly, the coincidence degree computing portion 72 compares pieces of magnification information received from the magnification estimating means 61 to 63, and judges whether or not the pieces of magnification information output from the magnification estimating means 61 to 63 are coincident with one another, and outputs the result of the judgement to an error comparator portion 73.

Please replace paragraph on page 23, beginning at line 24 with the following amended paragraph:

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In a step S11, it is judged whether or not a next pixel is present. Fig. 13 is a flow chart showing a process of extracting the characteristic quantity (1), which is executed in the step S4 in Fig. 12. An operation of extracting the characteristic quantity (1) starts. A step S21 is executed to scan the pixels within the cut-out image area. A step S22 is executed to check if all the pixels have been scanned. If all the pixels are not scanned, a step S23 is executed to scan the subsequent pixels. The scanning operation is repeated ~~til~~ until all the pixels are scanned.

Please replace paragraph on page 26, beginning at line 20 with the following amended paragraph:

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A process of extracting the characteristic quantity (2) in the cut-out image area cut out in the step S3, which is executed in the step S6 in Fig. 12, is ~~a flow charted~~ chart in Fig. 15. An operation of extracting the characteristic quantity (2) starts. Then, a step S51 is executed to scan the pixels within the cut-out image area. A step ~~[[s52]]~~ S52 is executed to judge whether or not target pixels to be scanned are present within a characteristic quantity (2) extraction area 42 (Fig. 7). When the target pixels are present within ~~[[a]]~~ the characteristic quantity (2) extraction area 42, a step S53 is executed to check if the target pixels are the ON pixels.

Please replace paragraph on page 28, beginning at line 18 with the following amended paragraph:

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A process for estimating a magnification on the basis of the characteristic quantity (2), which is executed in the step S7 in Fig. 12, may be constructed as in a flow chart shown in Fig. 17. An operation of estimating a magnification on the basis of the characteristic quantity (2) starts. A step S71 is executed. This step compares the number of ON pixels in the characteristic quantity (2) extraction area, extracted in the step S6, with the contents of a dictionary containing the upper and lower limits of the number of ON pixels in the object image 1, which corresponds to magnification levels in the characteristic quantity (2) extraction area 42. The step S71 judges whether or not a count value is within a threshold value range stored in the dictionary. If it is within the threshold value range, a step ~~S71~~ S72 is executed to judge that the object image 1 is present within the cut-out image area, from the geometrical pattern of the object image 1, and

912 then a step S73 is executed to output a magnification level corresponding to the threshold value within which the count value falls, and the process under execution ends.

Please replace paragraph on page 29, beginning at line 12 with the following amended paragraph:

913 When in the step S71, the number of the ON pixels in the characteristic quantity (2) extraction area, extracted in the step S6, is out of the threshold value range stored in the dictionary, a step S74 is executed to judge that the object image 1 is not present within the cut-out image area, from the geometric pattern of the object image 1, and a step S75 is executed. This step outputs information stating that the that the object image 1 is not present within the cut-out image area 41, and the process under execution ends.

Please replace paragraph on page 29, beginning at line 21 with the following amended paragraph:

914 A process, executed in the step S8 (Fig. 12), for extracting the characteristic quantity (3) within the cut-out image area cut out in the step S3 is a flow ~~charted~~ chart in Fig. 18. An operation of extracting the characteristic quantity (3) starts. A step S81 is executed to scan the pixels within the cut-out image area. A step S82 is then executed to check if the target pixels to be scanned are present within the characteristic quantity (3) extraction area. When the target pixels to be scanned are present within the characteristic quantity (3) extraction area, a step S83 is executed to judge if the target pixels and the pixel preceding to the former as viewed in the fast scan direction are inverted in ON/OFF state.

Please replace paragraph on page 33, beginning at line 15 with the following amended paragraph:

Q15 The recognizing unit 86 may employ the above-mentioned unique construction. Specifically, the recognizing unit 86 judges whether or not an object image is present in input image data, and outputs the resultant data to the control unit 82. In this case, even ~~when~~ when the input image data has been magnified, the object image can be detected as described above.

Please replace paragraph on page 34, beginning at line 9 with the following amended paragraph:

Q16 When the recognizing unit 86 judges that the object image is present, the control unit 82 carries out a process of making the input image data invalid. An example of the invalidating process is to generate given data to paint out the whole output image with a predetermined color, and the image forming unit 85 forms an image of the generated data. In an alternative, the recognizing unit 86 prohibits the image forming unit 85 from generating the received image data, thereby prohibiting the image formation.